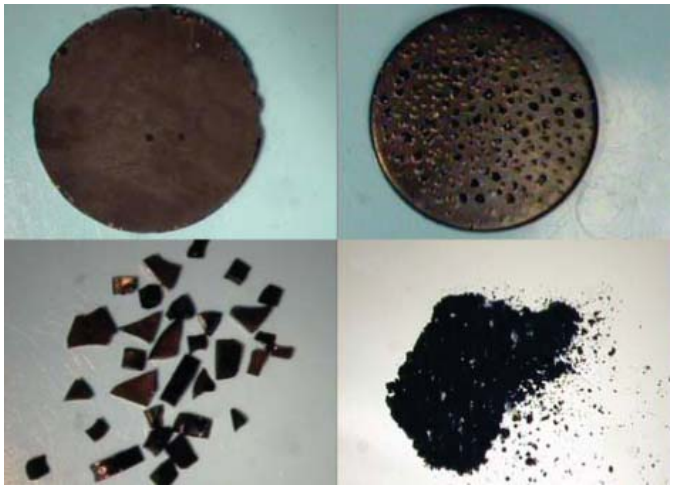
NAVAL RESEARCH LABORATORY

TECHNOLOGY LICENSING OPPORTUNITY

INEXPENSIVE SYNTHESIS OF CARBON NANOTUBES IN SOLID DOMAIN



CNT compositions produced by NRL method

Our novel method of synthesizing carbon nanotube (CNT) and metal nanoparticle compositions involves melt processable organometallic compounds and polymers heat treated to elevated temperatures under atmospheric pressure. Formation of single-walled carbon nanotubes (SWNTs) and metal nanoparticles occurs at the atomic and molecular levels in the solid carbonaceous domain during the carbonization process.

Available for License: US Patent Nos. 6,673,953; 6,770,583; 6,846,345; 6,884,861; 6,890,504; 7,198,771; 7,273,509; 7,347,885; 7,374,597; 7,722,851; and 7,819,938. Other related applications have been filed.

Advantages/Features

Shaped components (solid, film, and fiber)

Low-cost, high-yield, and large-scale production of SWNTs

Useful structural, electric, and/or magnetic properties

Applications

Microelectronic/nanoelectronic devices

Batteries and fuel cells

Superconductive and magnetic devices

Drug delivery systems

Structural composites

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